

FIG. 1

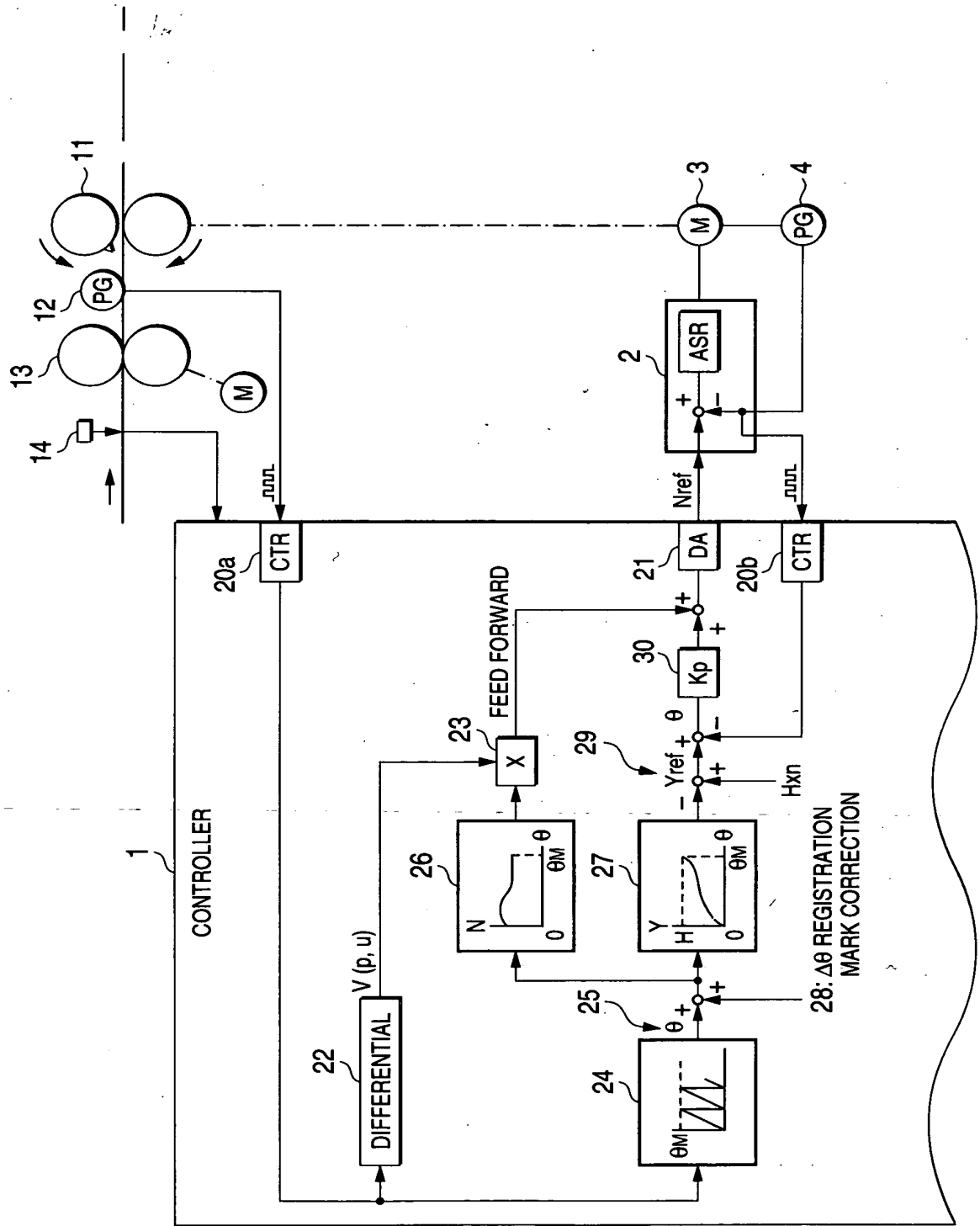
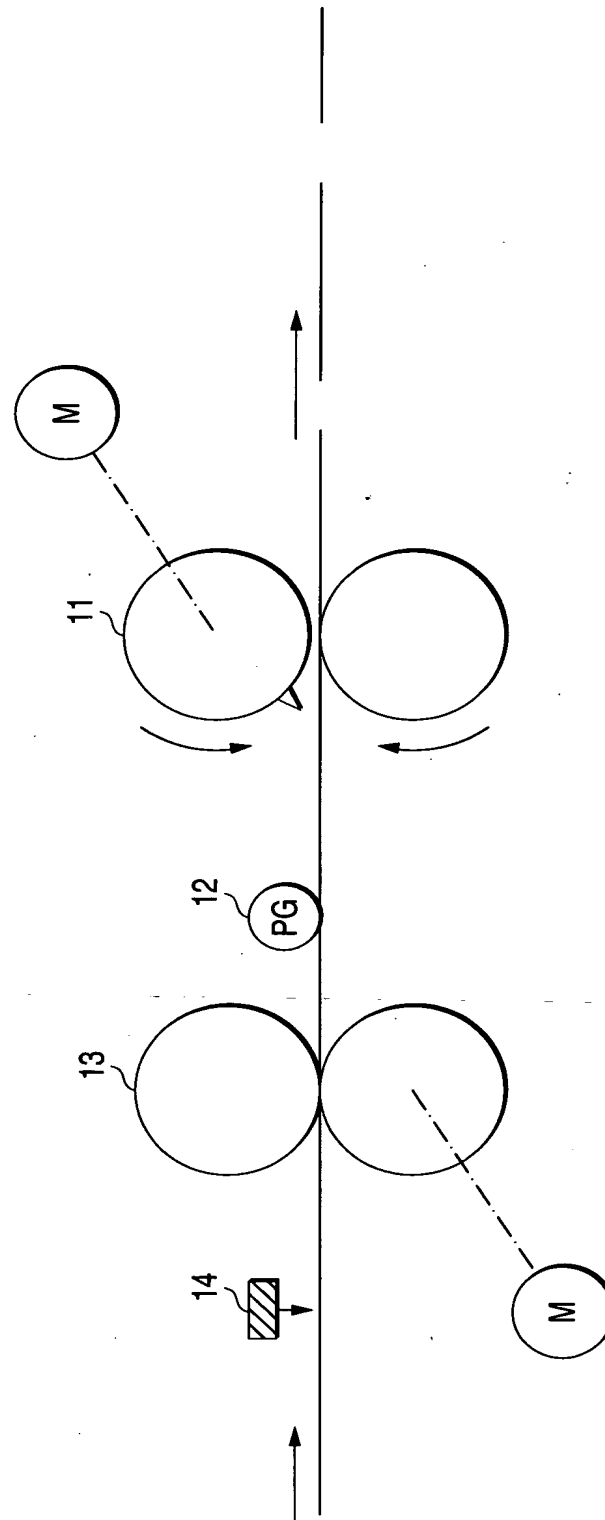
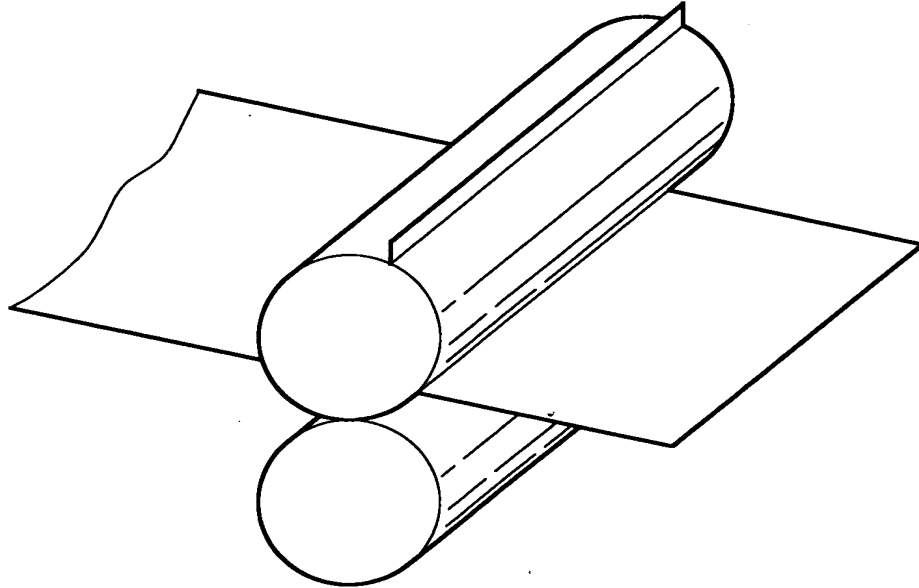


FIG. 2



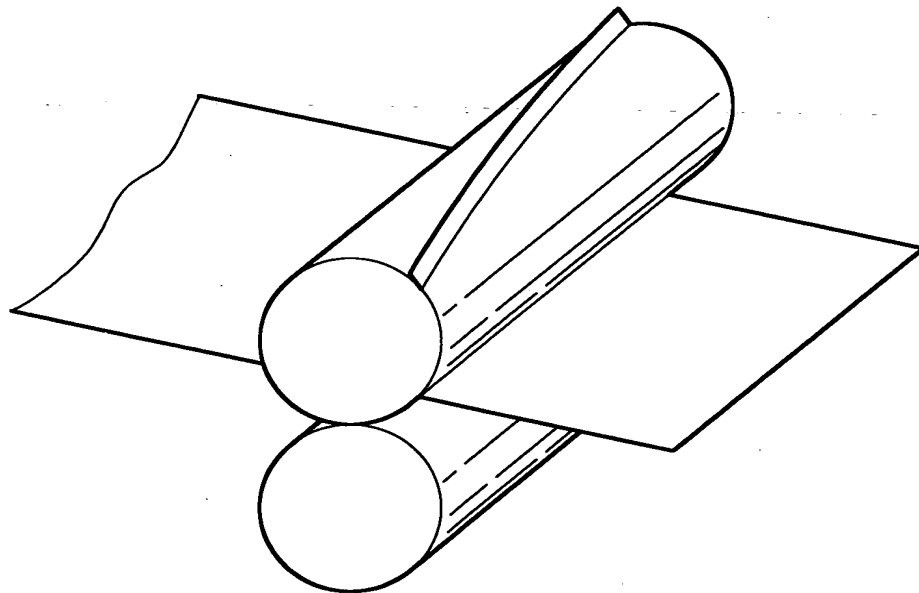
**FIG. 3A**

**STRAIGHT BLADE**



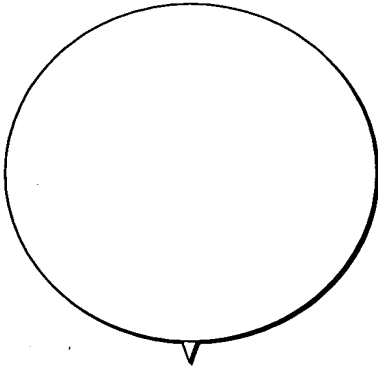
**FIG. 3B**

**SPIRAL BLADE**



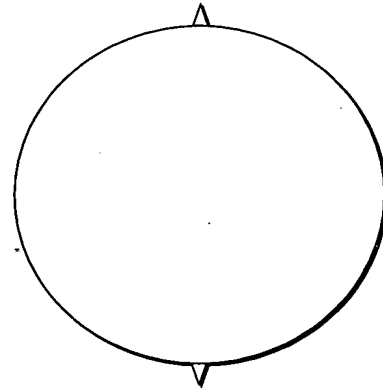
**FIG. 4A**

**SINGLE BLADE**



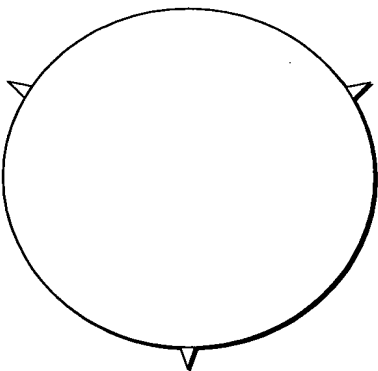
**FIG. 4B**

**DOUBLE BLADE**



**FIG. 4C**

**TRIPLE BLADE**



**FIG. 4D**

**QUADRUPLE BLADE**

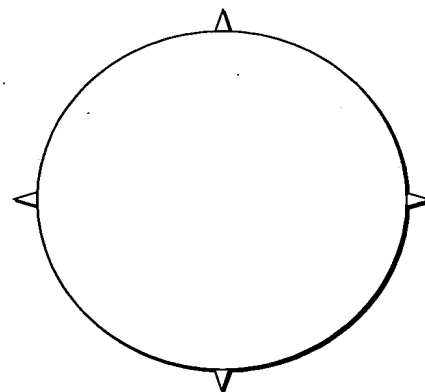
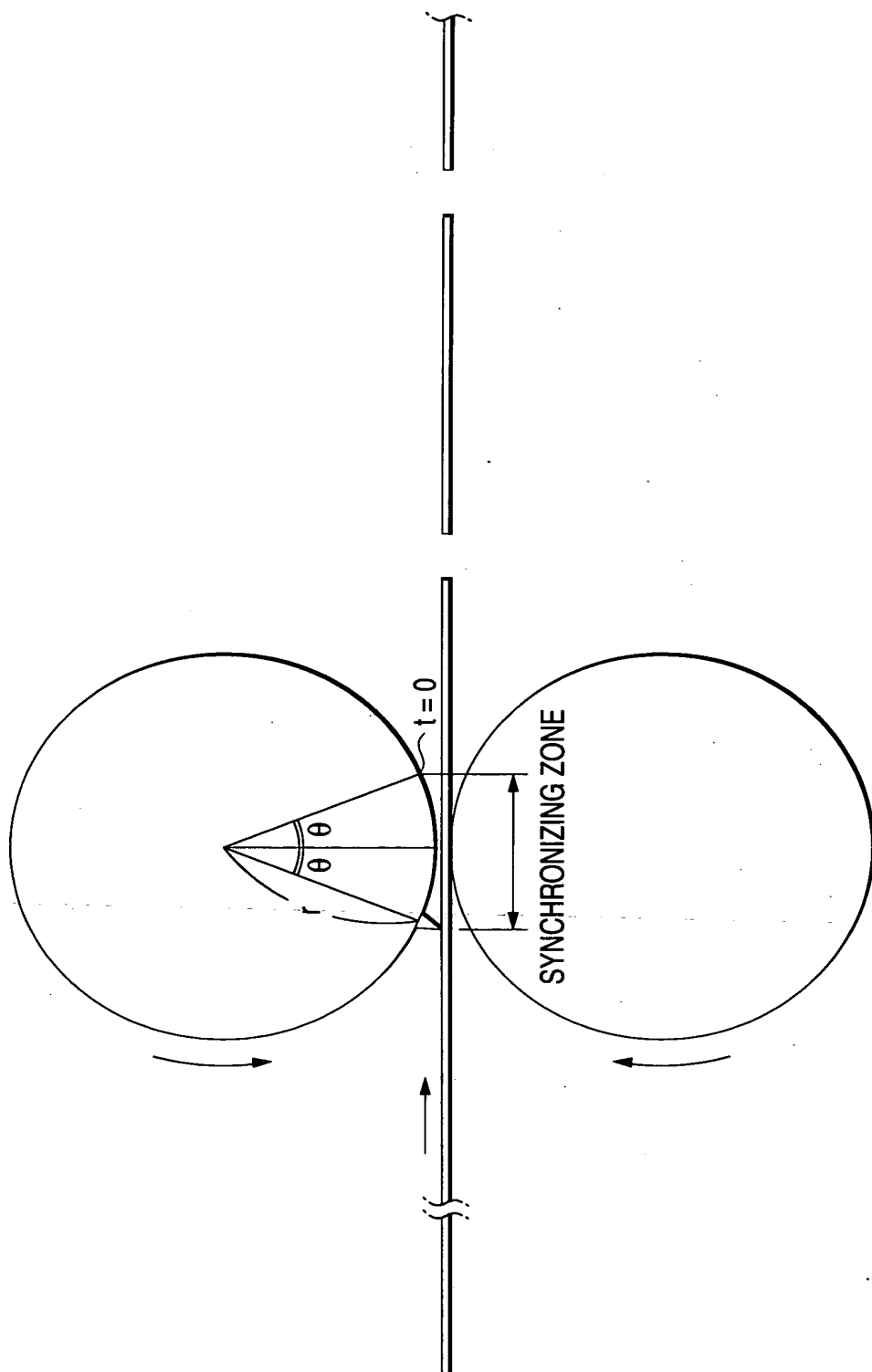


FIG. 5



[ CASE OF SPIRAL BLADE ]

FIG. 6A

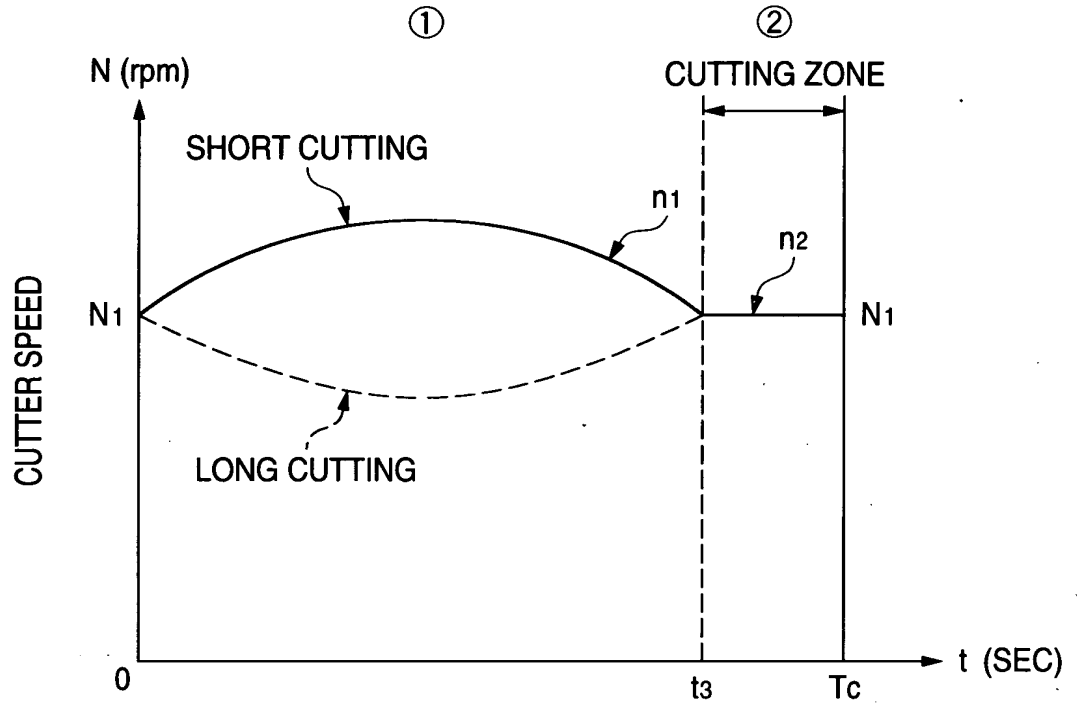


FIG. 6B

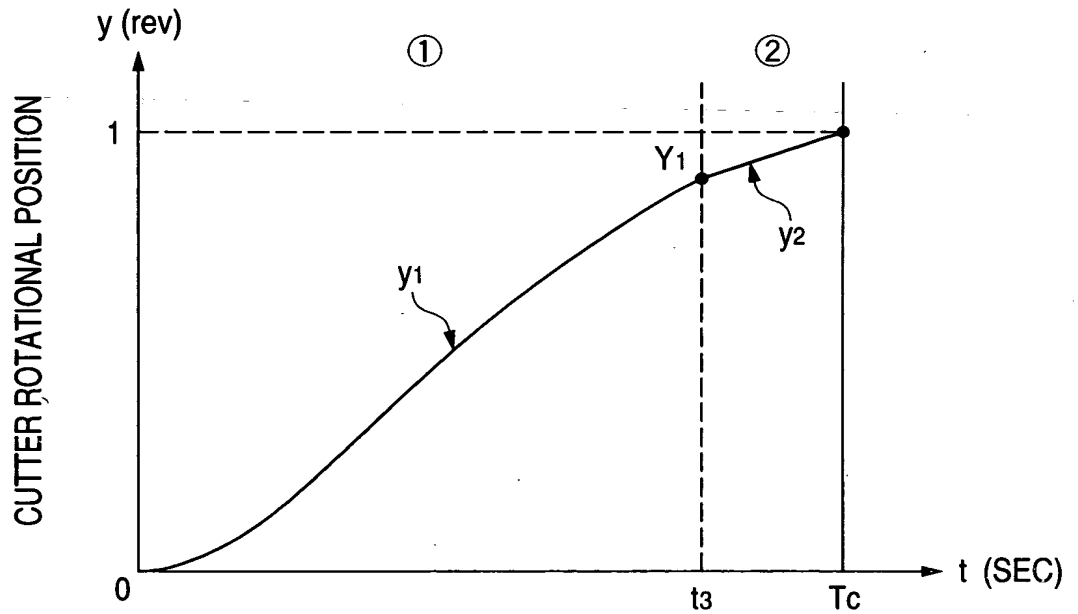


FIG. 7A

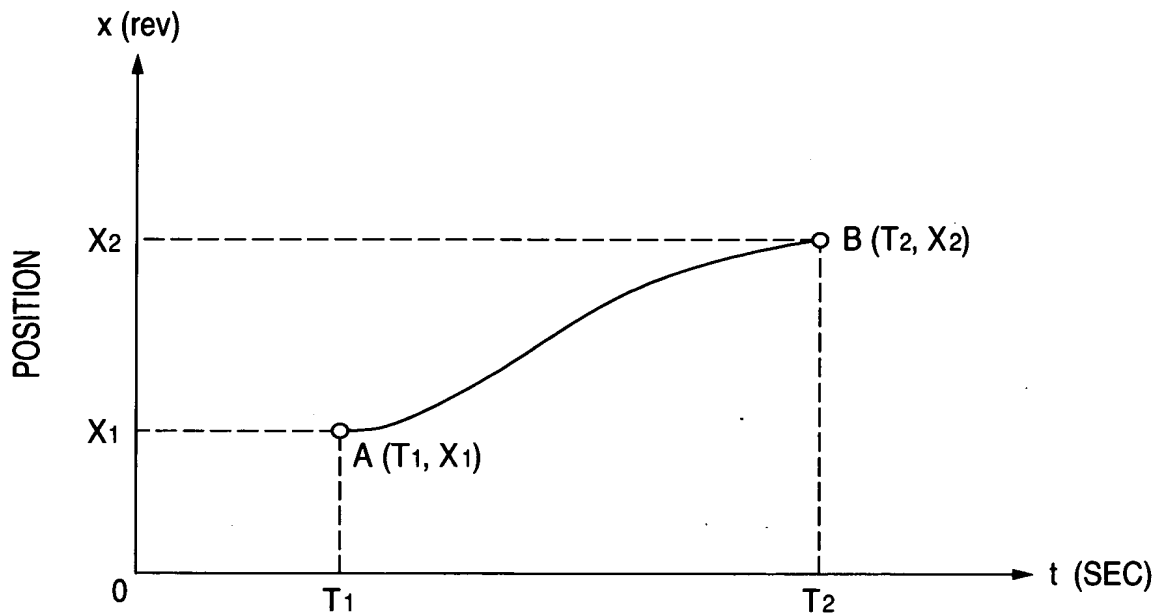
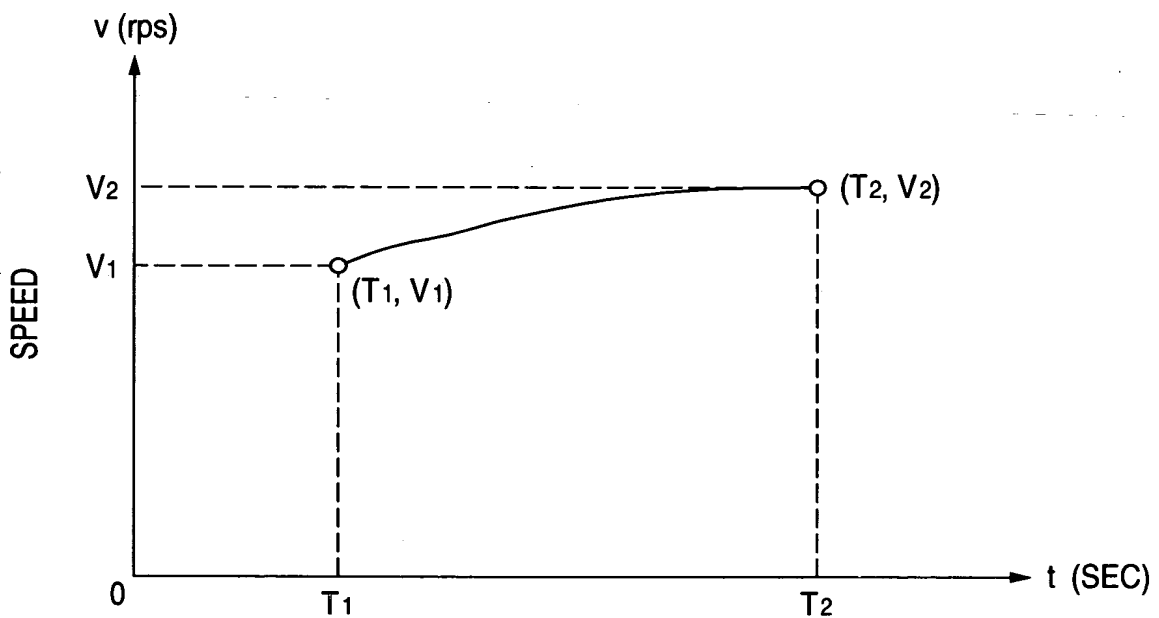


FIG. 7B



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FIG. 8

(CAM CURVE EQUATIONS OF SPIRAL BLADE)

ZONE	CUTTER ROTATIONAL SPEED $n$ (rpm)	CUTTER ROTATIONAL POSITION $y$ (rev)
①	$n_1 = 60 (3At^2 + 2Bt + C)$	$y_1 = At^3 + Bt^2 + Ct + D$
②	$n_2 = N_1$	$y_2 = \frac{(1 - Y_1)}{(T_c - t_3)} (t - T_c) + 1$



[ CASE OF STRAIGHT BLADE ]

FIG. 9A

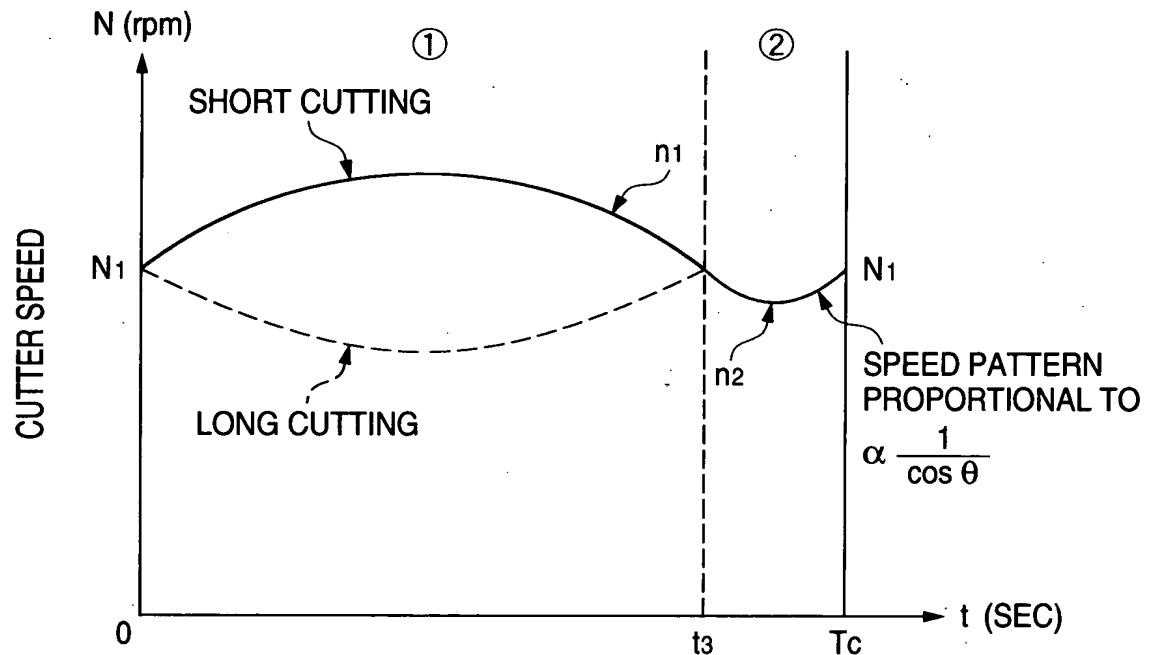


FIG. 9B

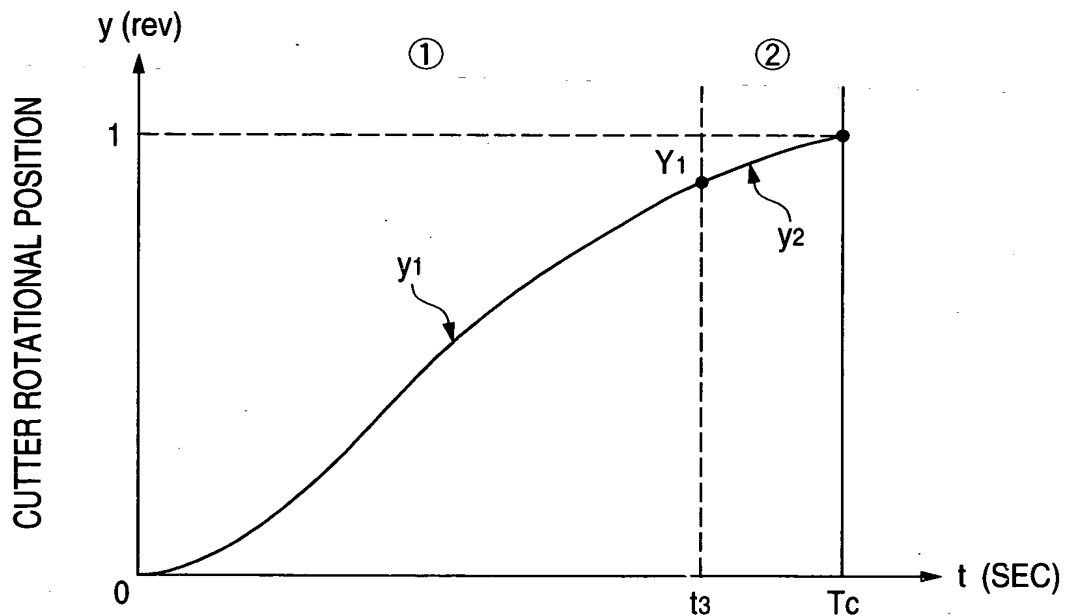


FIG. 10

(CAM CURVE EQUATIONS OF STRAIGHT BLADE)

ZONE	CUTTER ROTATIONAL SPEED n (rpm)	CUTTER ROTATIONAL POSITION y (rev)
①	$n_1 = 60 (3At^2 + 2Bt + C)$	$y_1 = At^3 + Bt^2 + Ct + D$
②	$n_2 = \frac{60}{2\pi \sqrt{\left(\frac{r}{V_0}\right)^2 - \left(t - \frac{t_3 + T_c}{2}\right)^2}}$	$y_2 = \frac{1}{360} \sin^{-1} \left\{ \left( \frac{V_0}{r} \right) \left( t - \frac{t_3 + T_c}{2} \right) \right\} + G$ $\left( G = 1 - \frac{\theta_0}{360} \right)$ <p>(UNIT OF <math>\sin^{-1} x</math>: (°))</p>

FIG. 11A

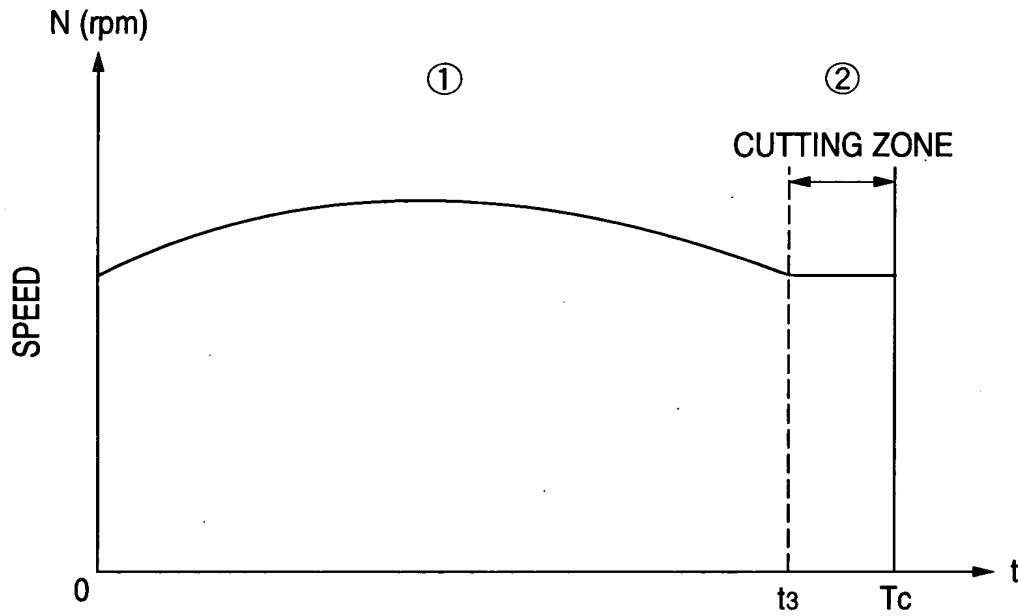
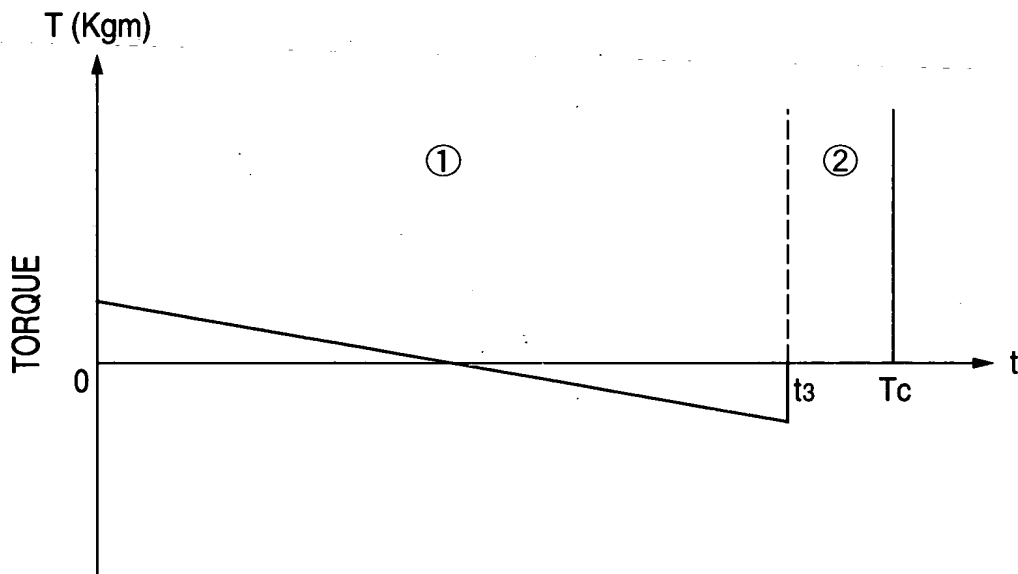


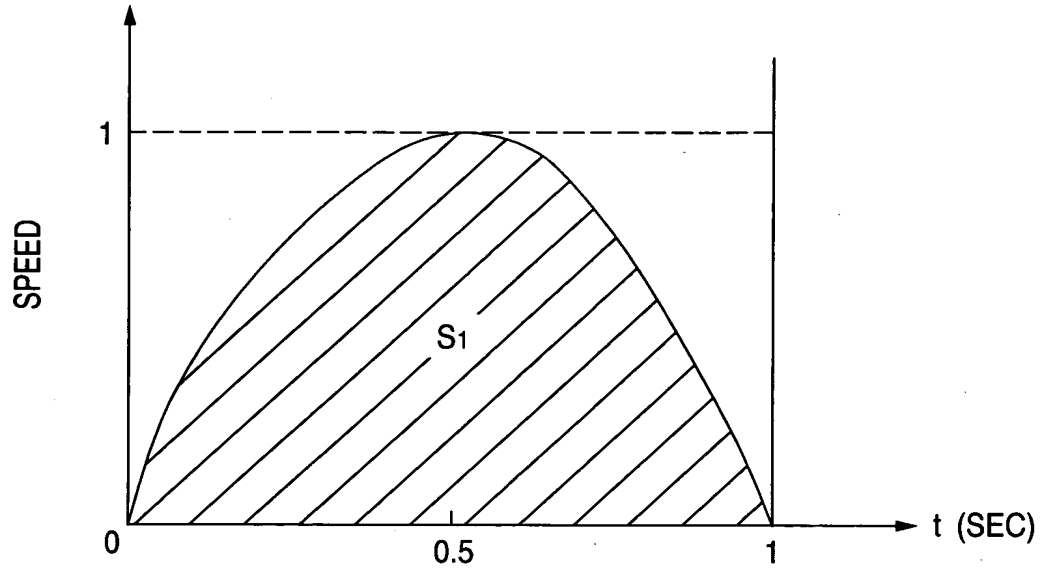
FIG. 11B



**FIG. 12A**

[ SPEED PATTERN OF QUADRATIC FUNCTION WAVEFORM ]

N (ABSOLUTE NUMBER)



**FIG. 12B**

[ SPEED PATTERN OF TRAPEZOIDAL WAVEFORM ]

N (ABSOLUTE NUMBER)

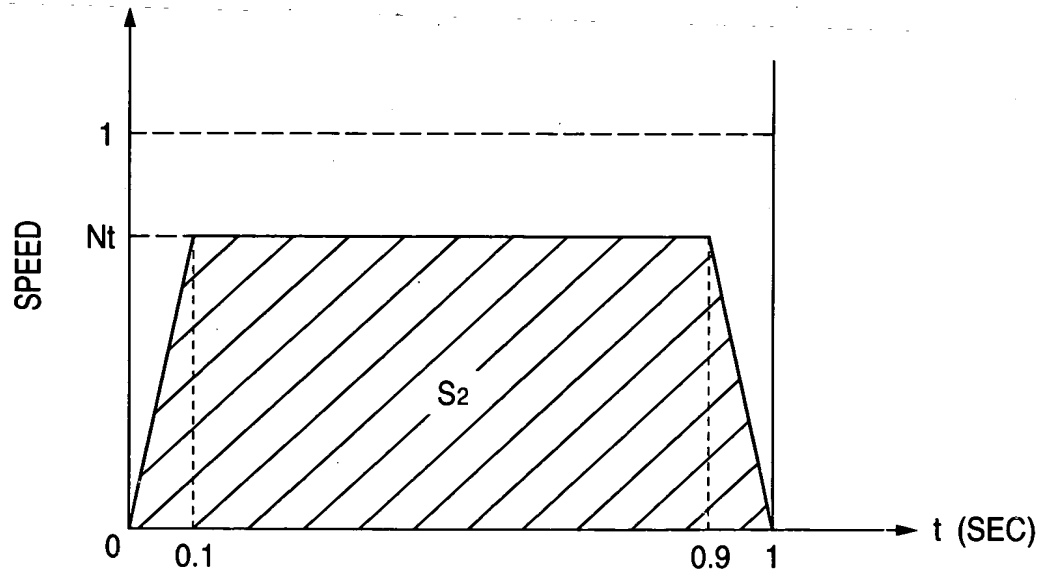


FIG. 13A

[ SPEED PATTERN OF GENERALIZED TRAPEZOIDAL WAVEFORM ]

N (ABSOLUTE NUMBER)

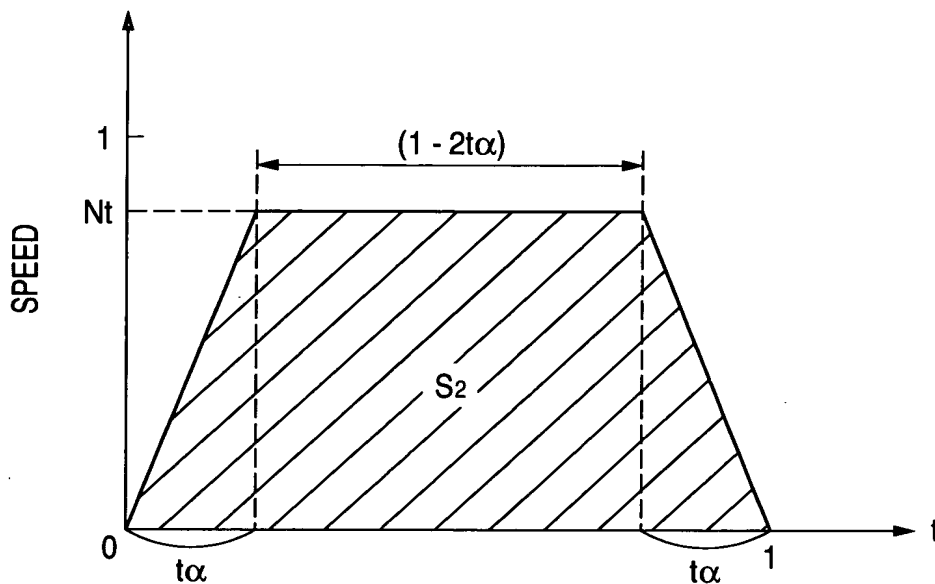
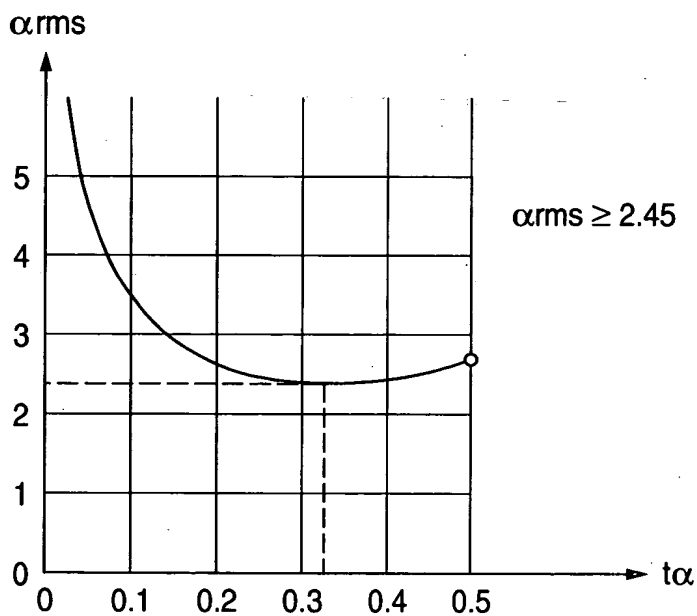


FIG. 13B



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FIG. 14

LV CURVE

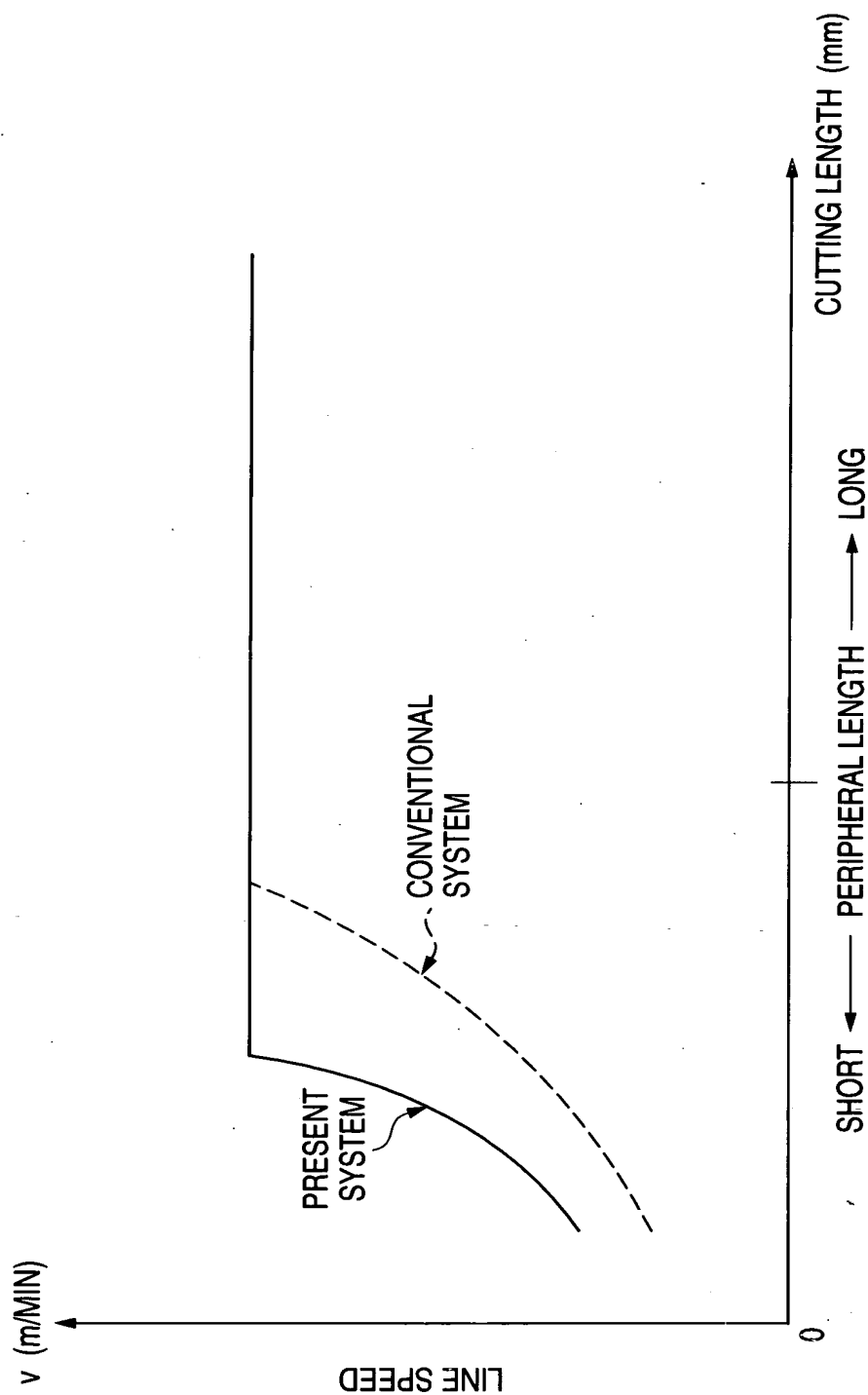


FIG. 15

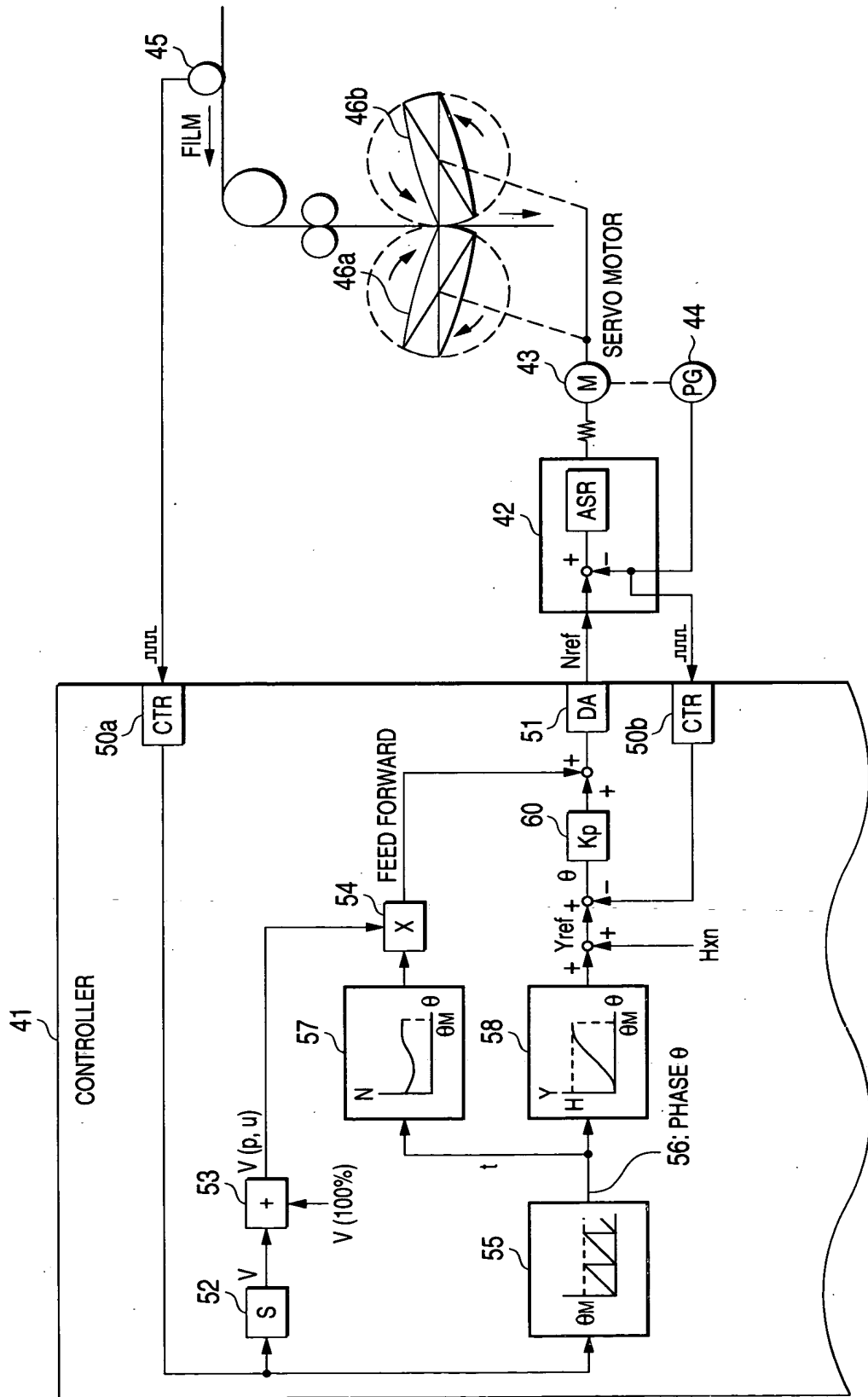


FIG. 16A

[ SINGLE HEATER LATERAL SEALING MECHANISM ]

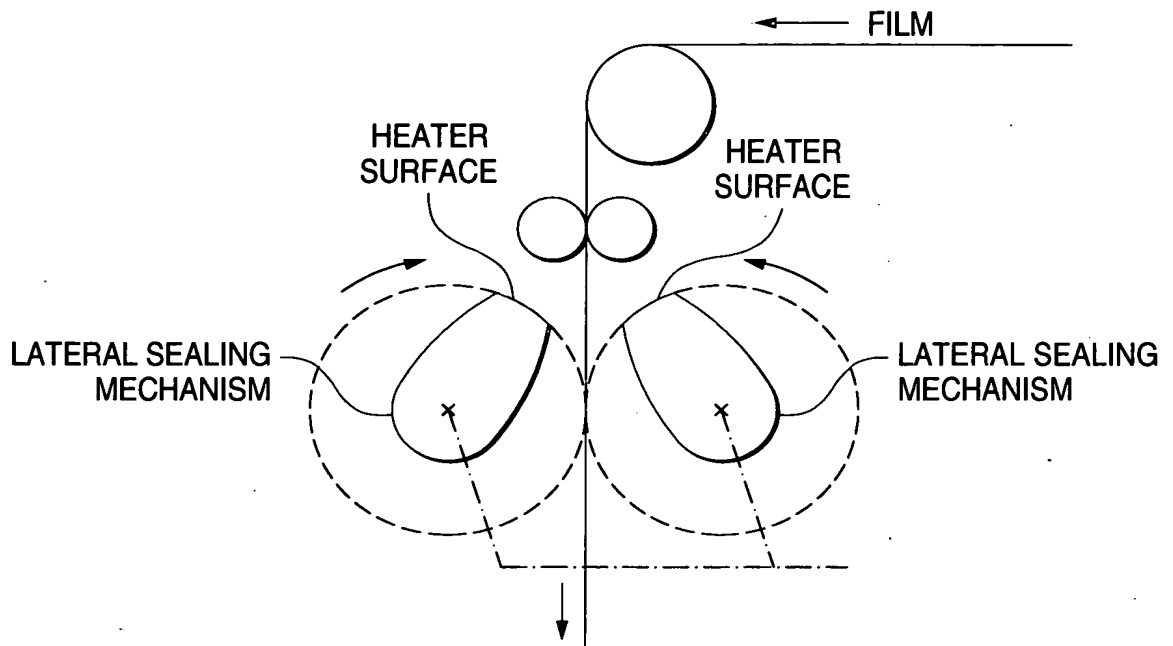


FIG. 16B

[ DOUBLE HEATER LATERAL SEALING MECHANISM ]

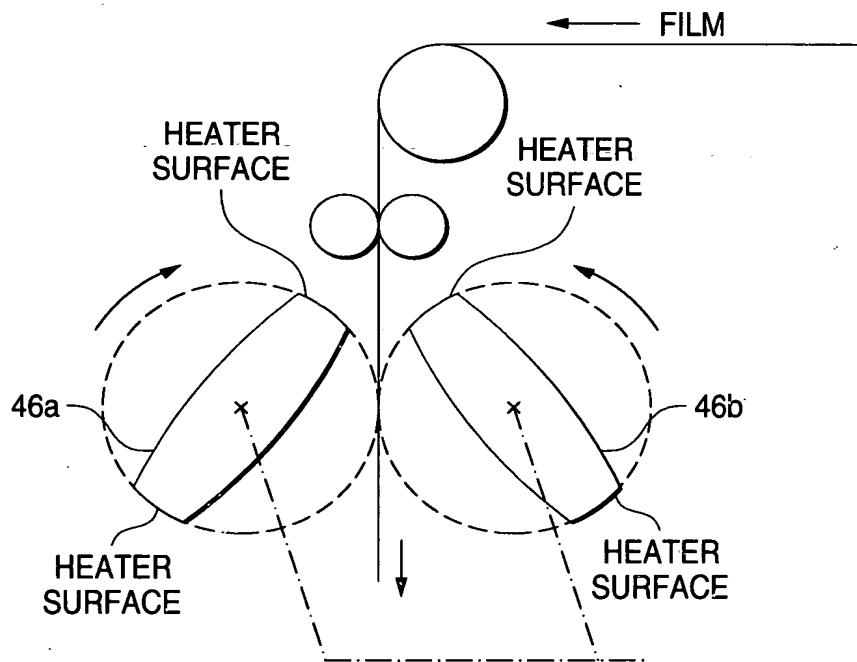




FIG. 17

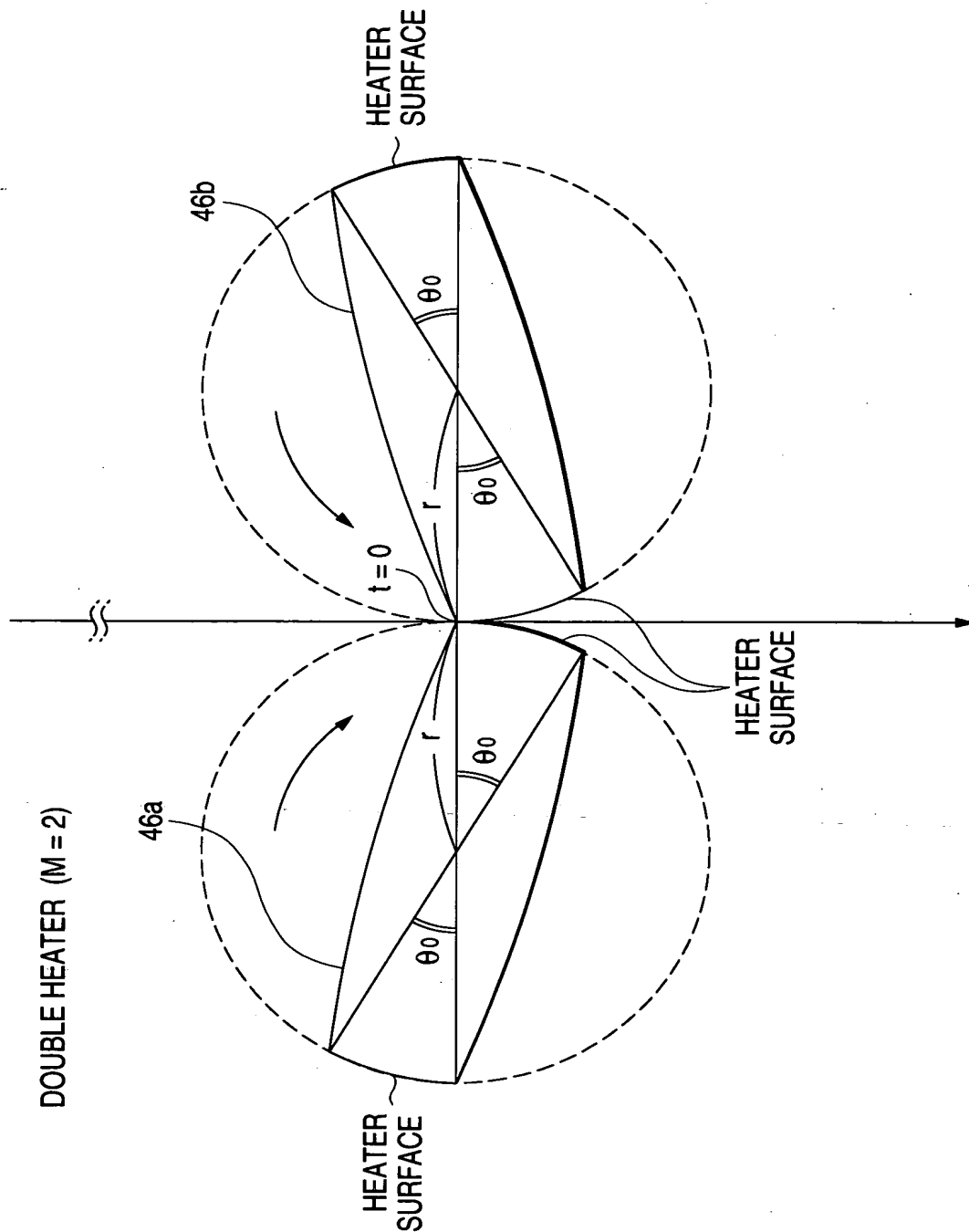


FIG. 18A

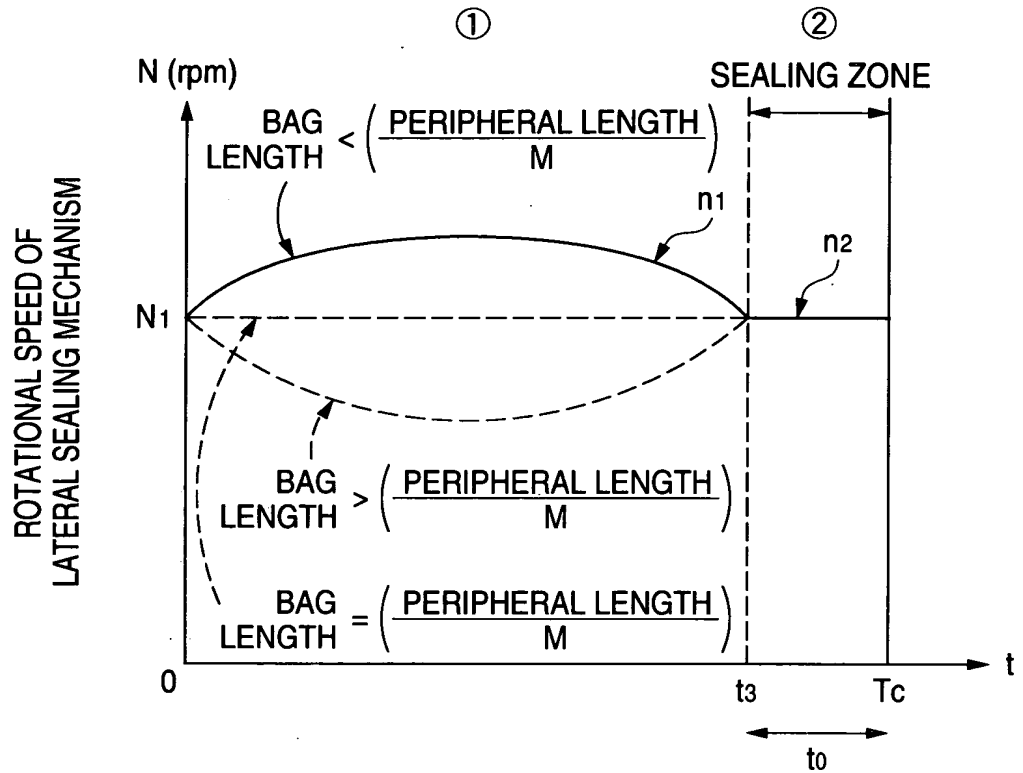


FIG. 18B

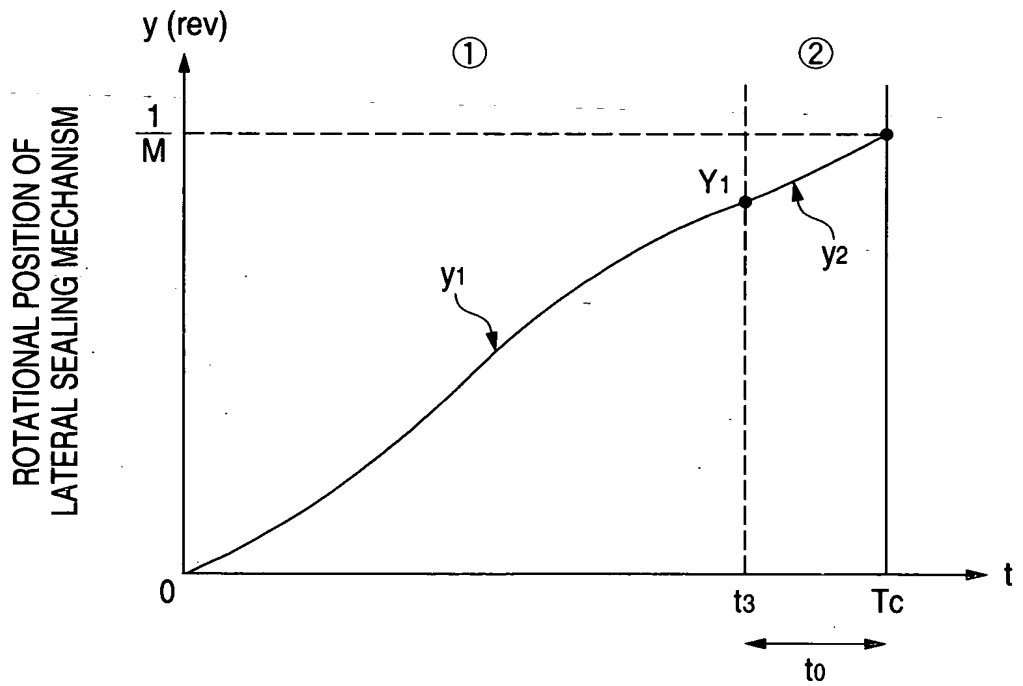


FIG. 19

ZONE	ROTATIONAL SPEED OF LATERAL SEALING MECHANISM n (rpm)	ROTATIONAL POSITION OF LATERAL SEALING MECHANISM y (rev)
① NON SEALING ZONE	$n1 = 60 (3At^2 + 2Bt + C)$	$y1 = At^3 + Bt^2 + Ct + D$
② SEALING ZONE	$n2 = N1 \cdot (\text{CONSTANT})$	$y2 = \frac{\frac{1}{M} - Y1}{Tc - t3} (t - Tc) + \frac{1}{M}$

FIG. 20

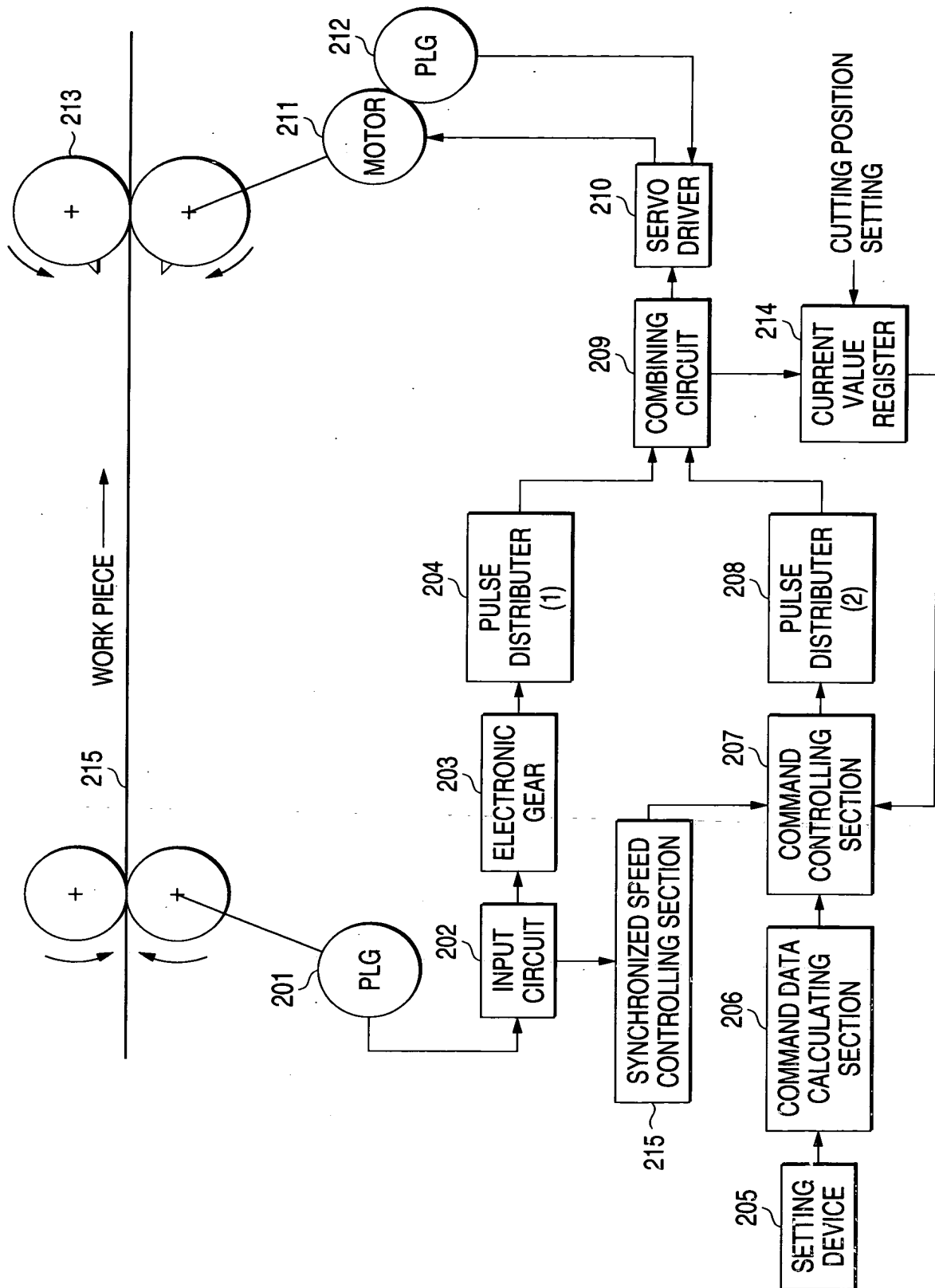


FIG. 21A

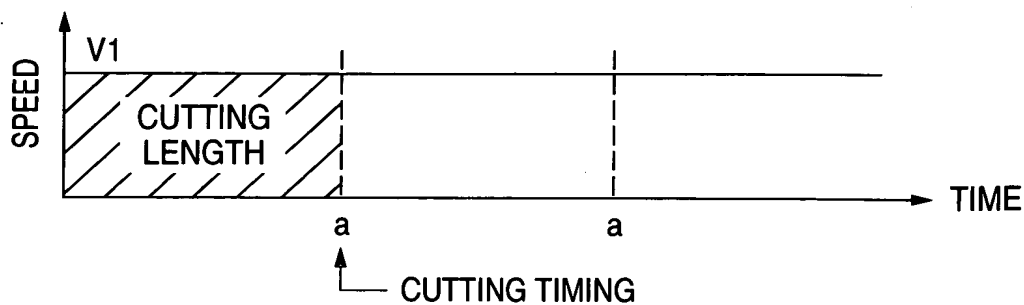


FIG. 21B

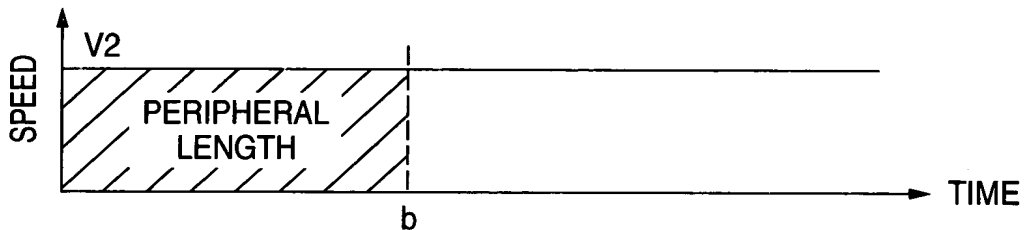


FIG. 21C

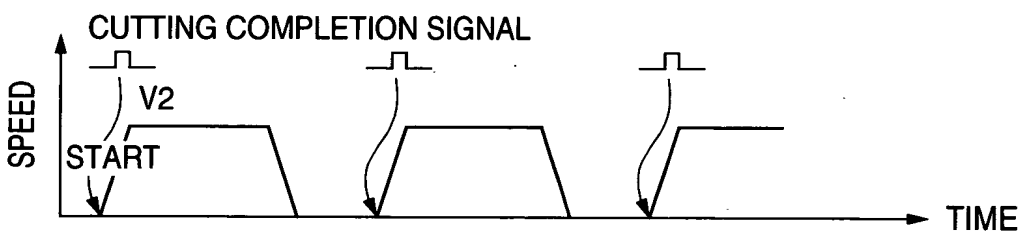


FIG. 21D

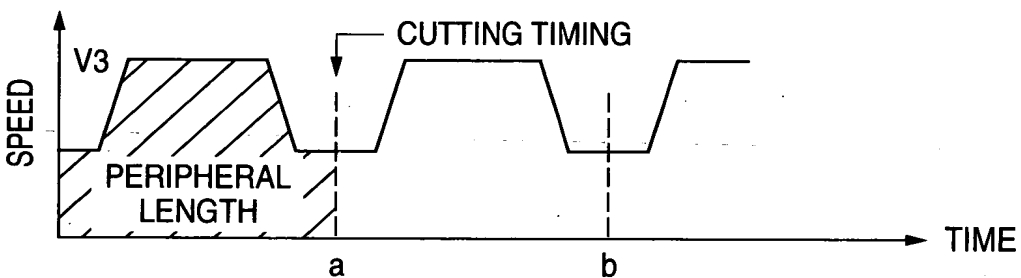


FIG. 21E

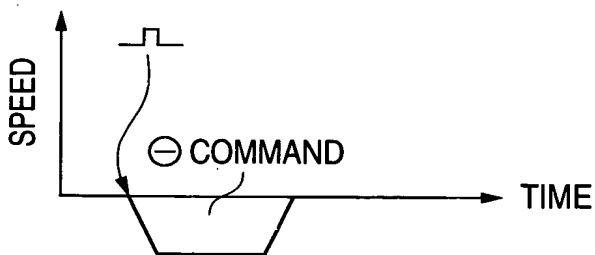


FIG. 21F

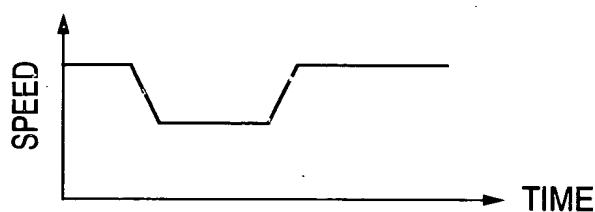
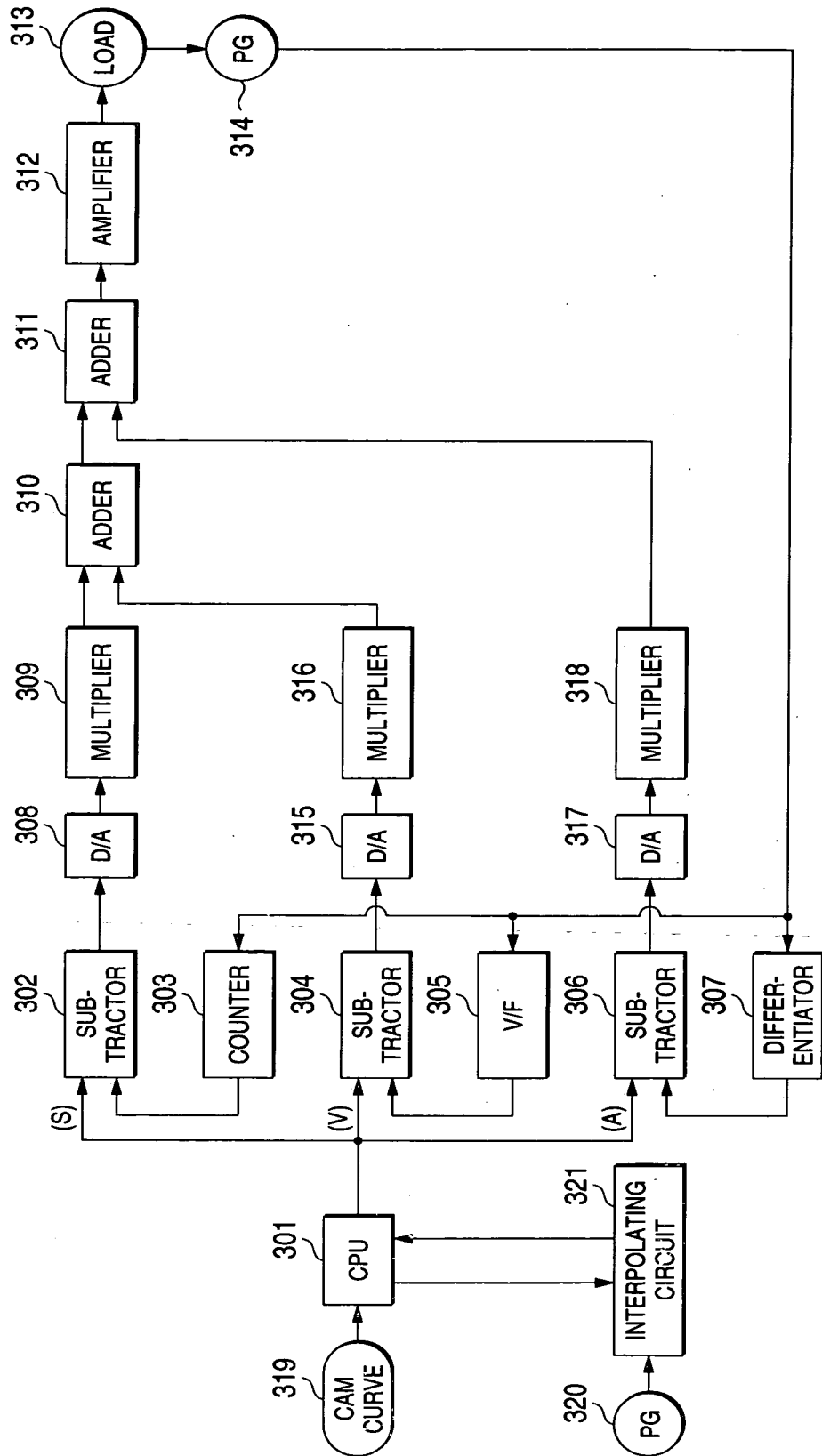
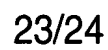


FIG. 22



**SECRET**



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FIG. 24A

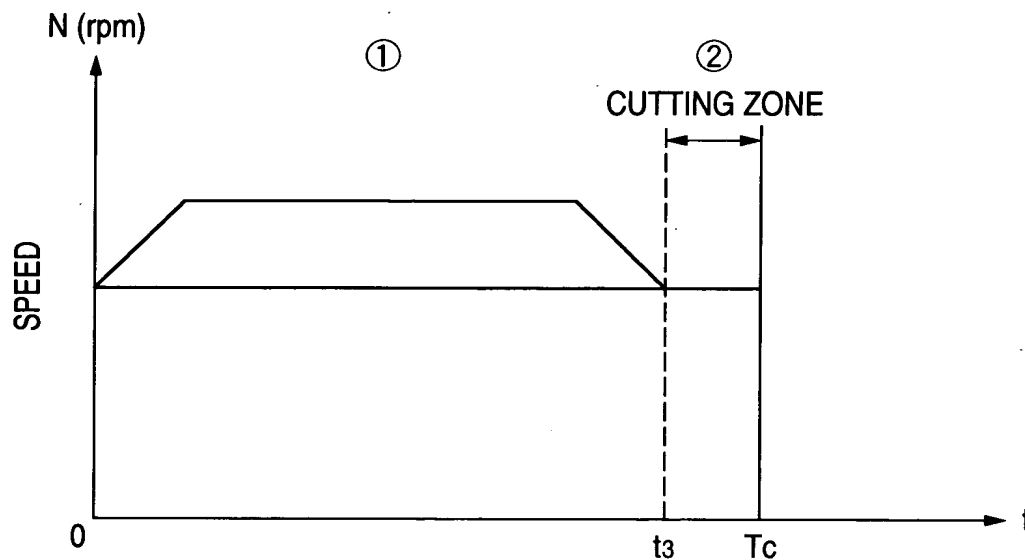


FIG. 24B

